

Permit #: 28.0701-01

Effective Date: November 13, 2012

Expiration Date: June 7, 2015

The seal of the State of South Dakota is a circular emblem. It features a central illustration of a landscape with a river, a bridge, and a building. Above the illustration is a banner that reads "UNDER GOD THE PEOPLE RULE". The outer ring of the seal contains the text "STATE OF SOUTH DAKOTA" at the top and "GREAT SEAL" at the bottom, separated by two stars. The year "1889" is inscribed at the bottom of the seal.

**SOUTH DAKOTA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
TITLE V AIR QUALITY PERMIT**

A handwritten signature in black ink, appearing to read "S. M. Pirner".

**Steven M Pirner, Secretary
Department of Environment and Natural Resources**

Under the South Dakota Air Pollution Control Regulations

Pursuant to Chapter 34A-1-21 of the South Dakota Codified Laws and the Air Pollution Control Regulations of the State of South Dakota and in reliance on statements made by the owner designated below, a permit to operate is hereby issued by the Secretary of the Department of Environment and Natural Resources. This permit authorizes such owner to operate the unit(s) listed in Table 1-1 under the listed conditions.

A. Owner

1. Company Name and Mailing Address

Magellan Pipeline Company
One Williams Center, Mail Drop 27-3
Tulsa, OK 74172

2. Actual Source Location if Different from Above

5300 West 12th Street
Sioux Falls, SD 57107

3. Permit Contact

Jeffery Pursley
Air Quality Specialist
(918) 859-1967

4. Facility Contact

Tom Barr
Area Supervisor
(605) 338-5771

5. Responsible Official

Melanie Little
Vice President of Operations

B. Permit Revisions or Modifications

January 11, 2011- Administrative Amendment to change responsible official
March 11, 2011- Administrative Amendment to change responsible official
June 11, 2012- Loading Rack upgrades
July 2, 2012- Regulatory-compliance-date-extension granted by EPA

C. Type of Operation

Refined petroleum pipeline terminal

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1.0 STANDARD CONDITIONS

1.1 Operation of Source. In accordance with Administrative Rules of South Dakota (ARSD) 74:36:05:16.01(8), the owner or operator shall operate the units, controls, and processes as described in Table 1-1 in accordance with the statements, representations, and supporting data contained in the complete permit application submitted and dated September 21, 2012, unless modified by the conditions of this permit. The application consists of the application forms, supporting data, and supplementary correspondence. If the owner or operator becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in an application, such information shall be promptly submitted.

Table 1-1 – Description of Permitted Units, Operations, and Processes

Unit	Description	Maximum Operating Capacity	Control Device
#1	1994 truck loading submerged fill rack	72,000 gallons per hour	1994 John Zink two-stage vapor combustor
#2	1955 American Locomotive Company, model 463, engine fueled with natural gas and diesel fuel	810 horsepower (5.9 million Btus per hour heat input)	Not applicable
#3	Tank 120 – 1947 aboveground petroleum storage tank with a vertical fixed roof	79,000 gallons	Not applicable
#5	Tank 520 – 1947 aboveground ethanol storage tank with a vertical fixed roof	457,674 gallons	Not applicable
#6	Tank 526 – 1947 aboveground gasoline/distillate transmix storage tank with a vertical fixed roof	457,548 gallons	Not applicable
#7	Tank 662 – 1947 aboveground gasoline storage tank with internal floating roof	770,322 gallons	1982 internal floating roof
#8	Tank 663 – 1947 aboveground gasoline storage tank with internal floating roof	770,490 gallons	1982 internal floating roof
#9	Tank 666 – 1947 aboveground gasoline storage tank with internal floating roof	770,280 gallons	1982 internal floating roof
#10	Tank 667 – 1947 aboveground gasoline storage tank with internal floating roof	770,532 gallons	1982 internal floating roof
#11	Tank 668 – 1947 aboveground gasoline storage tank with internal floating roof	770,280 gallons	1982 internal floating roof
#12	Tank 756 – 1945 aboveground gasoline storage tank with internal floating roof	1,108,128 gallons	1993 internal floating roof
#13	Tank 1339 – 1950 aboveground gasoline storage tank with internal	1,509,438 gallons	1981 internal floating roof

Unit	Description	Maximum Operating Capacity	Control Device
	floating roof		
#14	Tank 1340 – 1950 aboveground gasoline storage tank with internal floating roof	1,501,542 gallons	1982 internal floating roof
#15	Tank 1341 – 1950 aboveground gasoline storage tank with internal floating roof	1,544,256 gallons	1982 internal floating roof
#16	Tank 1342 – 1950 aboveground gasoline storage tank with internal floating roof	1,544,088 gallons	1981 internal floating roof
#17	Tank 4007 – 1970 aboveground gasoline storage tank with internal floating roof	1,690,752 gallons	1970 Internal floating roof

1.2 Duty to comply. In accordance with ARSD 74:36:05:16.01(12), the owner or operator shall comply with the conditions of this permit. An owner or operator who knowingly makes a false statement in any record or report or who falsifies, tampers with, or renders inaccurate, any monitoring device or method is in violation of this permit. A violation of any condition in this permit is grounds for enforcement, reopening this permit, permit termination, or denial of a permit renewal application. The owner or operator, in an enforcement action, cannot use the defense that it would have been necessary to cease or reduce the permitted activity to maintain compliance. The owner or operator shall provide any information requested by the Secretary to determine compliance or whether cause exists for reopening or terminating this permit.

1.3 Property rights or exclusive privileges. In accordance with ARSD 74:36:05:16.01(12), the State's issuance of this permit, adoption of design criteria, and approval of plans and specifications does not convey any property rights of any sort, any exclusive privileges, any authorization to damage, injure or use any private property, any authority to invade personal rights, any authority to violate federal, state or local laws or regulations, or any taking, condemnation or use of eminent domain against any property owned by third parties. The State does not warrant that the owner's or operator's compliance with this permit, design criteria, approved plans and specifications, and operation under this permit, will not cause damage, injury or use of private property, an invasion of personal rights, or violation of federal, state or local laws or regulations. The owner or operator is solely and severally liable for all damage, injury or use of private property, invasion of personal rights, infringement of federal, state or local laws and regulations, or taking or condemnation of property owned by third parties, which may result from actions taken under the permit.

1.4 Penalty for violating a permit condition. In accordance with South Dakota Codified Laws (SDCL) 34A-1, a violation of a permit condition may subject the owner or operator to civil or criminal prosecution, a state penalty of not more than \$10,000 per day per violation, injunctive action, administrative permit action, and other remedies as provided by law.

1.5 Inspection and entry. In accordance with SDCL 34A-1-41, the owner or operator shall allow the Secretary to:

1. Enter the premises where a regulated activity is located or where pertinent records are stored;

2. Have access to and copy any records that are required under this permit;
3. Inspect operations regulated under this permit; and/or
4. Sample or monitor any substances or parameters for the purpose of assuring compliance.

1.6 Severability. In accordance with ARSD 74:36:05:16.01(11), any portion of this permit that is void or challenged shall not affect the validity of the remaining permit requirements.

1.7 Permit termination, modification, or revocation. In accordance with ARSD 74:36:05:46, the Secretary may recommend that the Board of Minerals and Environment terminate, modify, or revoke this permit for violations of SDCL 34A-1 or the federal Clean Air Act or for nonpayment of any outstanding fee or enforcement penalty.

1.8 Credible evidence. In accordance with ARSD 74:36:13:07, credible evidence may be used for the purpose of establishing whether the owner or operator has violated or is violation of this permit. Credible evidence is as follows:

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at the source:
 - a. A monitoring method approved for the source pursuant to 40 CFR § 70.6(a)(3) and incorporated in this permit; or
 - b. Compliance methods specified in an applicable plan;
2. The following testing, monitoring, or information gathering methods are presumptively credible testing, monitoring, or information-gathering methods:
 - a. Any monitoring or testing methods approved in this permit, including those in 40 CFR Parts 51, 60, 61, and 75; or
 - b. Other testing, monitoring, or information-gathering methods that produce information comparable to that produced by any method in section (1) or (2)(a).

2.0 PERMIT FEES

2.1 Annual air fee required. In accordance with ARSD 74:36:05:06.01, the owner or operator shall submit an annual administrative fee and an annual fee. The fee is based on actual emissions in accordance with ARSD 74:37.

2.2 Annual operational report. In accordance with ARSD 74:37:01:06, the Secretary will supply the owner or operator with an annual operational report in January of each year. The owner or operator shall complete and submit the operational report to the Secretary by March 1 of each year. The responsible official shall sign the operational report in the presence of a notary public.

2.3 Annual air fee. In accordance with ARSD 74:37:01:08, the Secretary will notify the owner or operator of the required annual air emission fee and administrative fee by June 1 of each year. The fees shall accrue on July 1 and are payable to the Department of Revenue by July 31 of each year.

3.0 PERMIT AMENDMENT AND MODIFICATION CONDITIONS

3.1 Permit flexibility. In accordance with ARSD 74:36:05:30, the owner or operator shall have the flexibility to make changes to the source during the term of this permit. The owner or operator shall provide the Secretary written notice at least seven days in advance of the proposed change (NOTE: The Secretary will forward a copy of the written notice to EPA). The written notice shall include a brief description of the change, the date on which the change is to occur, any change in emissions, and the proposed changes to this permit.

The Secretary will notify the owner or operator whether the change is an administrative permit amendment, a minor permit amendment, or a permit modification. A proposed change that is considered an administrative permit amendment or a minor permit amendment can be completed immediately after the Secretary receives the written notification. The owner or operator must comply with both the applicable requirements governing the change and the proposed permit terms and conditions until the Secretary takes final action on the proposed change.

A proposed change that is considered a modification can not be constructed until the Secretary takes final action on the proposed change. Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

3.2 Administrative permit amendment. In accordance with ARSD 74:36:05:33, the Secretary has 60 days from receipt of a written notice to verify that the proposed change is an administrative permit amendment. The Secretary considers a proposed change an administrative permit amendment if the proposed change accomplishes one of the following:

1. Corrects typographical errors;
2. Changes the name, address, or phone number of any person identified in this permit or provides a similar minor administrative change at the source;
3. Requires more frequent monitoring or reporting by the source;
4. The ownership or operational control of a source change and the Secretary determines that no other change in this permit is necessary. However, the new owner must submit a certification of applicant form and a written statement specifying the date for transfer of operating permit responsibility, coverage, and liability; or
5. Any other changes that the Secretary and the administrator of EPA determines to be similar to those requirements in this condition.

3.3 Minor permit amendment. In accordance with ARSD 74:36:05:38, the Secretary has 90 days from receipt of a written notice or 15 days after the end of EPA's 45-day review period, whichever is later, to take final action on a minor permit amendment. Final action consists of issuing or denying a minor permit amendment or determining that the proposed change is a permit modification. The Secretary considers a proposed change to be a minor permit amendment if the proposed change:

1. Does not violate any applicable requirements;
2. Does not involve significant changes to existing monitoring, reporting, or record keeping requirements;

3. Does not require or change a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; or
4. Does not seek to establish or change a permit term or condition for which the source has assumed to avoid an applicable requirement, a federally enforceable emission cap, or an alternative emission limit. An alternative emission limit is approved pursuant to regulations promulgated under section 112(i)(5) of the federal Clean Air Act.

3.4 Permit modification. In accordance with ARSD 74:36:05:39, an owner or operator may apply for a permit modification. A permit modification is any proposed change that meets the definition of a modification in ARSD 74:36:01:10 or is not an administrative amendment or a minor permit amendment. Modification is defined as a physical change or change in operation that increases the amount of air pollutant emitted by the source or results in the emission of an air pollutant not previously emitted. Permit modifications are subject to the same procedural requirements, including public comment, as the original permit issuance except that the required review shall cover only the proposed changes.

3.5 Permit revision. In accordance with ARSD 74:36:05:40, the Secretary may reopen and revise this permit to meet requirements of SDCL 34A-1 or the federal Clean Air Act.

3.6 Testing new fuels or raw materials. In accordance with ARSD 74:36:11:04, an owner or operator may request permission to test a new fuel or raw material to determine if it is compatible with existing equipment before requesting a permit amendment or modification. A complete test proposal shall consist of the following:

1. A written proposal that describes the new fuel or raw material, operating parameters, and parameters that will be monitored and any testing associated with air pollutant emissions during the test;
2. An estimate of the type and amount of regulated air pollutant emissions that will result from the proposed change; and
3. The proposed schedule for conducting the test. In most cases the owner or operator will be allowed to test for a maximum of one week. A request for a test period longer than one week will need additional justification. A test period shall not exceed 180 days.

The Secretary shall approve, conditionally approve, or deny in writing the test proposal within 45 days after receiving a complete proposal. Approval conditions may include changing the test schedule or pollutant sampling and analysis methods. Pollutant sampling and analysis methods may include, but are not limited to performance testing, visible emission evaluation, fuel analysis, dispersion modeling, and monitoring of raw material or fuel rates.

If the Secretary determines that the proposed change will result in an increase in the emission of a regulated air pollutant or result in the emission of an additional regulated air pollutant, the Secretary shall give public notice of the proposed test for 30 days. The Secretary shall consider all comments received during the 30-day public comment period before making a final decision on the test.

The Secretary will not approve a test if the test would cause or contribute to a violation of a national ambient air quality standard.

4.0 PERMIT RENEWAL REQUIREMENTS

4.1 Permit effective. In accordance with ARSD 74:36:05:07, this permit shall expire five years from date of issuance unless reopened or terminated for cause.

4.2 Permit renewal. In accordance with ARSD 74:36:05:08, the owner or operator shall submit an application for a permit renewal at least 180 days before the date of permit expiration if the owner or operator wishes to continue an activity regulated by this permit. The current permit shall not expire and shall remain in effect until the Secretary takes final action on the timely permit renewal application.

4.3 Permit expiration. In accordance with ARSD 74:36:05:28, permit expiration terminates the owner's or operator's right to operate any unit covered by this permit.

5.0 RECORDKEEPING AND REPORTING REQUIREMENTS

5.1 Record keeping and reporting. In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall maintain all monitoring data, records, reports, and pertinent information specified by this permit for five years from the date of sample, measurement, report, or application, unless otherwise specified in this permit. The records shall be maintained on site for the first two years and may be maintained off site for the last three years, unless otherwise specified in this permit. All records must be made available to the Secretary for inspection. All notifications and reports shall be submitted to the following address:

South Dakota Department of Environment and Natural Resources
PMB 2020, Air Quality Program
523 E. Capitol, Joe Foss Building
Pierre, SD 57501-3182

5.2 Signatory requirements. In accordance with ARSD 74:36:05:12, all applications submitted to the Secretary shall be signed and certified by a responsible official. A responsible official for a corporation is a responsible corporate officer and for a partnership or sole proprietorship is a general partner or the proprietor, respectively. All reports or other information submitted to the Secretary shall be signed and certified by a responsible official or a duly authorized representative. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Secretary; and
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

The responsible official shall notify the Secretary if an authorization is no longer accurate. The new duly authorized representative must be designated prior to or together with any reports or information to be signed by a duly authorized representative.

5.3 Certification statement. In accordance with ARSD 74:36:05:16.01(14)(a), all documents required by this permit, including application forms, reports, and compliance certification, must be certified by a responsible official or a duly authorized representative. The certification shall include the following statement:

“I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document and all attachments are true, accurate, and complete.”

5.4 Monitoring log. In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall maintain a monitoring log. The monitoring log shall contain the following information:

1. Maintenance schedule for each piece of control equipment listed in Table 1-1. At a minimum, the maintenance schedule shall meet the manufacturer’s recommended schedule for maintenance. The following information shall be recorded for maintenance:
 - a. Identify the unit;
 - b. The date and time maintenance was performed;
 - c. Description of the type of maintenance;
 - d. Reason for performing maintenance;
 - e. Signature of person performing maintenance;
2. The owner or operator shall maintain relevant records of the occurrence and duration of each startup, shutdown, or malfunction of process equipment and/or air pollution control equipment; and
3. The following information shall be recorded within two days of each emergency exceedance:
 - a. The date of the emergency exceedance and the date the emergency exceedance was reported to the Secretary;
 - b. The cause(s) of the emergency;
 - c. The reasonable steps taken to minimize the emissions during the emergency; and
 - d. A statement that the permitted equipment was at the time being properly operated.

5.5 Annual compliance certification. In accordance with ARSD 74:36:05:16.01(14), the owner or operator shall submit an annual compliance certification letter to the Secretary by March 1 of each year this permit is in effect (NOTE: The Secretary will forward a copy of the certification letter to EPA). The certification shall contain the following information:

1. Methods used to determine compliance, including: monitoring, record keeping, performance testing and reporting requirements;
2. The source is in compliance and will continue to demonstrate compliance with all applicable requirements;
3. In the event the source is in noncompliance, a compliance plan that indicates how the source has or will be brought into compliance; and
4. Certification statement required in permit condition 5.3.

5.6 Reporting permit violations. In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall report all permit violations. A permit violation should be reported as soon as possible, but no later than the first business day following the day the violation was discovered. The permit violation may be reported by telephone to the South Dakota Department of Environment and Natural Resources at (605) 773-3151 or by FAX at (605) 773-5286. A written report shall be submitted within five days of discovering the permit violation. Upon prior

approval from the Secretary, the submittal deadline for the written report may be extended up to 30 days. The written report shall contain:

1. Description of the permit violation and its cause(s);
2. Duration of the permit violation, including exact dates and times; and
3. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the permit violation.

6.0 CONTROL OF REGULATED AIR POLLUTANTS

6.1 Visibility limit. In accordance with ARSD 74:36:12:01, the owner or operator may not discharge into the ambient air an air contaminant of a density equal to or greater than that designated as 20 percent opacity from any permitted unit, operation, or process listed in Table 1-1. This provision does not apply when the presence of uncombined water is the only reason for failure to meet the requirement.

6.2 Air emission exceedances -- normal operation. In accordance with ARSD 74:36:12:02, an exceedance of the operating limit in permit condition 6.1 is not considered a violation during brief periods of soot blowing, start-up, shutdown, or malfunctions. Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure caused entirely or in part by poor maintenance, careless operation, preventable equipment breakdown, or any other cause within the control of the owner or operator of the source is not a malfunction and is considered a violation.

6.3 Total suspended particulate matter limits. In accordance with ARSD 74:36:06:02(1), the owner or operator shall not allow the emission of total suspended particulate matter in excess of the emission limit specified in Table 6-1 for the appropriate permitted unit, operation, and process.

Table 6-1 – Total Suspended Particulate Matter Emission Limit

Unit	Description	Emission Limit
#1	Loading rack vapor combustor	0.5 pounds per million Btu heat input
#2	Dual fuel engine	0.6 pounds per million Btu heat input

6.4 Sulfur dioxide limits. In accordance with ARSD 74:36:06:02(2), the owner or operator shall not allow the emission of sulfur dioxide in excess of the emission limit specified in Table 6-2 for the appropriate permitted unit, operations, and process.

Table 6-2 – Sulfur Dioxide Emission Limit

Unit	Description	Emission Limit
#1	Loading rack vapor combustor	3.0 pounds per million Btu heat input
#2	Dual fuel engine	3.0 pounds per million Btu heat input

Compliance with the sulfur dioxide emission limit is based on a three-hour rolling average, which is the arithmetic average of three contiguous one-hour periods.

6.5 Air emission exceedances – emergency conditions. In accordance with ARSD 74:36:05:16.01(18), the Secretary will allow for an unavoidable emission exceedance of a technology-based emission limit if the exceedance is caused by an emergency condition and

immediate action is taken by the owner or operator to restore the operations back to normal. An emergency condition is a situation arising from a sudden and reasonably unforeseeable event beyond the control of the source, including acts of God. An emergency shall not include an emission exceedance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. The owner or operator shall notify the Secretary within two working days of the incident and take all steps possible to eliminate the excess emissions. The notification must provide a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. If the notification is submitted orally, a written report summarizing the information required by the notification shall be submitted and postmarked within 30 days of the oral notification.

6.6 Circumvention not allowed. In accordance with ARSD 74:36:05:47.01, the owner or operator may not install, use a device, or use a means that conceals or dilutes an air emission that would otherwise violate this permit. This includes operating a unit or control device that emits air pollutants from an opening other than the designed stack, vent, or equivalent opening.

6.7 Minimizing emissions. In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.11(d), the owner or operator shall at all times, when practicable, maintain and operate all permitted units in a manner that minimizes air pollution emissions.

7.0 PERFORMANCE TESTS

7.1 Performance test may be required. In accordance with ARSD 74:36:11:02, the Secretary may request a performance test. A performance test shall be conducted while operating the unit at or greater than 90 percent of its maximum design capacity, unless otherwise specified by the Secretary. A performance test that is conducted while operating less than 90 percent of its maximum design capacity will result in the operation being limited to the percent achieved during the performance test. The Secretary has the discretion to extend the deadline for completion of performance test required by the Secretary if circumstances reasonably warrant but will not extend the deadline past a federally required performance test deadline.

7.2 Test methods and procedures. The owner or operator shall conduct the performance test in accordance with 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M. The Secretary may approve an alternative method if a performance test specified in 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M is not federally applicable or federally required.

7.3 Representative performance test. In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.8(c), performance tests shall be conducted under such conditions as the Secretary shall specify to the owner or operator based on the representative performance of the unit being tested. The owner or operator shall make available to the Secretary such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in this permit.

7.4 Submittal of test plan. In accordance with ARSD 74:36:11:01, the owner or operator shall submit the proposed testing procedures to the Secretary at least 30 days prior to any performance test. The Secretary will notify the owner or operator if the proposed test procedures are approved or denied. If the proposed test procedures are denied, the Secretary will provide written notification that outlines what needs to be completed for approval.

7.5 Notification of test. In accordance with ARSD 74:36:11:03, the owner or operator shall notify the Secretary at least 10 days prior to the start of a performance test to arrange for an agreeable test date when the Secretary may observe the test. The Secretary may extend the deadline for the performance test in order to accommodate schedules in arranging an agreeable test date.

7.6 Performance test report. In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall submit a performance test report to the Secretary within 60 days after completing the performance test or by a date designated by the Secretary. The performance test report shall contain the following information:

1. A brief description of the process and the air pollution control system being tested;
2. Sampling location description(s);
3. A description of sampling and analytical procedures and any modifications to standard procedures;
4. Test results;
5. Quality assurance procedures and results;
6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
7. Raw data sheets for field sampling and field and laboratory analyses;
8. Documentation of calculations;
9. All data recorded and used to establish parameters for compliance monitoring; and
10. Any other information required by the test method.

8.0 STANDARDS FOR BULK GASOLINE TERMINALS

8.1 Vapor collection system. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(a), the owner or operator shall operate and maintain the truck loading rack (Unit #1) with a vapor collection system designed to collect the total organic compound vapors displaced from tank trucks during product loading.

8.2 Vapor collection system emission limit. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(b), the owner or operator shall not allow the total organic compound emissions from the vapor collection system due to the loading of liquid product into gasoline tank trucks to exceed 35 milligrams of total organic compounds per liter of gasoline loaded.

8.3 Product loading into vapor-tight gasoline tank trucks. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(e), liquid product shall only be loaded into vapor-tight gasoline tank trucks, in which the owner or operator has implemented the following procedures:

1. Obtain vapor tightness documentation described in permit condition 8.12 for each gasoline tank truck loaded at the facility;
2. Record the tank identification number as each gasoline tank truck is loaded at the facility;
3. Within two weeks after the corresponding tank is loaded, crosscheck each tank identification number obtained in subsection (2) with the file of tank vapor tightness documentation, unless either of the following subsections is maintained;
 - a. If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or
 - b. If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.

If either the quarterly or semiannual cross-check provided in subsection (3)(a) and (b) reveals that these conditions were not maintained, the source must return to biweekly monitoring until such time as these conditions are again met.
4. Notify the owner or operator of each non-vapor tight gasoline tank truck loaded at the facility within one week of the documentation cross-check in subsection (3); and
5. Take steps to assure that the non-vapor tight gasoline tank truck will not be reloaded at the facility until vapor tightness documentation for that tank is obtained;

Alternate procedures to those described above for limiting gasoline tank truck loading may be used upon application to and approval by the Environmental Protection Agency's Administrator.

8.4 Vapor collection system compatibility. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(f), the owner or operator shall act to assure that loading of gasoline tank trucks are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.

8.5 Vapor collection systems connected during product loading. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(g), the owner or operator shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck. Examples include training drivers in the hookup procedures and posting visible reminder signs at the loading rack.

8.6 Gauge pressure limit in the delivery tank. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(h), the vapor collection and liquid loading equipment shall be designed, operated, and maintained to prevent gauge pressure in the delivery tank from exceeding 4,500 Pascals during product loading.

8.7 Pressure vacuum vent design. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(i), the pressure vacuum vent in the bulk gasoline terminal's vapor collection system shall not begin to open at a system pressure less than 4,500 Pascals.

8.8 Leak detection during product loading. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.502(j), the owner or operator shall inspect the vapor collection system, the vapor processing system, and each loading rack handling gasoline each calendar month. The inspection shall be conducted for total organic compound liquid or vapor leaks during the loading of gasoline tank trucks. Leak detection methods incorporating sight,

sound, or smell are acceptable. Each leak detected shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.

8.9 Testing methods and procedures. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.503(a) and (b), the owner or operator shall use as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this chapter. The three-run requirement in 40 CFR § 60.8(f) does not apply to this chapter. Immediately before a performance test required to determine compliance with permit condition 8.2 and 8.6, the owner or operator shall use 40 CFR Part 60, Appendix A, Method 21 to monitor for vapor leaks at all potential sources in the vapor collection system equipment while a gasoline tank truck is being loaded. The owner or operator shall repair all leaks with readings of 10,000 parts per million (as methane) or greater before conducting the performance test.

8.10 Vapor combustor performance test requirements. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.503(c), if the owner or operator is required to conduct a performance test on the vapor combustor to determine compliance with permit condition 8.2, the performance test shall meet the following procedures:

1. The performance test shall be six hours long during which at least 300,000 liters of gasoline is loaded. If this is not possible, the test may be continued the same day until 300,000 liters of gasoline is loaded or the test may be resumed the next day with another complete six hour period. If the test is resumed the following day, the 300,000 liter criterion does not have to be met. However, as much as possible, testing should be conducted during the six hour period in which the highest throughput normally occurs;
2. If the vapor combustor is intermittent in operation, the performance test shall begin at a reference vapor holder level and shall end at the same reference point. The test shall include at least two startups and shutdowns of the vapor combustor. If this does not occur automatically, the system shall be manually controlled;
3. The emission rate of total organic compounds shall be computed using Equation 8.1;

Equation 8.1 – Total Organic Compound Emission Rate

$$E = K \times \sum_{i=1}^n [(V_{esi} \times C_{ei}) (L \times 10^6)]$$

Where:

- E = Emission rate of total organic compound, in milligrams per liter of gasoline loaded;
 - V_{esi} = Volume of air-vapor mixture exhausted at each interval (i), in standard cubic meters;
 - C_{ei} = Concentration of total organic compounds at each interval (i), in parts per million;
 - L = Total volume of gasoline loaded, in liters;
 - n = Number of testing intervals;
 - i = Emission testing interval of 5 minutes; and
 - K = Density of calibration gas, 1.83×10^6 for propane and 2.41×10^6 for butane in milligrams per standard cubic meter.
4. The performance test shall be conducted in intervals of five minutes. For each interval “i”, readings from each measurement shall be recorded, and the volume exhausted (V_{esi}) and the corresponding average total organic compounds concentration (C_{ei}) shall be determined. The sampling system response time shall be considered in determining the average total organic compounds concentration corresponding to the volume exhausted;

5. 40 CFR Part 60, Appendix A, Method 2B shall be used to determine the volume of air-vapor mixture exhausted at each interval;
6. 40 CFR Part 60, Appendix A, Method 25A or 25B shall be used to determine the total organic compound concentration at each interval. The calibration gas shall be either propane or butane. The owner or operator may exclude the methane and ethane content in the exhaust vent by any method that is approved by the Secretary; and
7. During the performance test, the volume of gasoline dispensed from the loading rack shall be determined from terminal records or readings from gasoline dispensing meters at the loading rack.

8.11 Pressure measurement on vapor combustor for Unit #1. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.503(d), if the owner or operator is required to conduct a performance test on the vapor combustor to determine compliance with permit condition 8.6, a pressure measurement device capable of measuring up to 500 millimeters of water gauge pressure, with a precision of plus or minus 2.5 millimeters of water, shall be calibrated and installed on the vapor combustor at a pressure tap located as close as possible to the connection with the gasoline tank truck. The pressure shall be recorded every five minutes while a gasoline tank truck is being loaded. The highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.

8.12 Notification of physical or operational changes to Unit #1. In accordance with ARSD 74:36:07:01, incorporating by reference 40 CFR §§ 60.7(a)(4) and 60.14(e), the owner or operator shall notify the Secretary of any physical or operational change to Unit #1 which may increase the emission rate of an air pollutant regulated under Chapter 8.0 of this permit unless the change meets one of the following exempt criteria:

1. Maintenance, repair, and replacement determined to be routine;
2. An increase in production rate of Unit #1, if that increase can be accomplished without a capital expenditure;
3. An increase in the hours of operation;
4. Use of an alternative fuel or raw material if Unit #1 was designed to accommodate that alternative fuel or raw material;
5. The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or replaced by a system which is determined to be less environmentally beneficial; and
6. The relocation or change in ownership of Unit #1.

The notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change; present and proposed emission control systems; productive capacity of Unit #1 before and after the change; the expected completion date of the change, and any additional information the Secretary may request that is relevant to the change.

8.13 Tank truck vapor tightness documentation. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.505(a), the tank truck vapor tightness documentation required by permit condition 8.3 shall be maintained on file at the terminal.

8.14 Tank truck vapor tightness documentation updates. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.505(b), the owner or operator shall update each gasoline tank truck file at least once per year to reflect current test results as determined by 40 CFR Part 60, Appendix A, Method 27. This documentation shall include the following information at a minimum:

1. Test title: Gasoline Delivery Tank Pressure Test – 40 CFR Part 60, Appendix A, Method 27;
2. Tank owner and address;
3. Tank identification number;
4. Testing location;
5. Date of test;
6. Tester name and signature;
7. Witnessing inspector, if any: name, signature, and affiliation; and
8. Test results: Actual pressure change in 5 minutes, millimeters of water (average for 2 runs).

8.15 Leak inspection record. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.505(c), the owner or operator shall maintain for at least two years a record of each monthly leak inspection required under permit condition 8.8. At a minimum, the following information must be contained in the file:

1. Date of inspection;
2. Findings (may indicate no leaks discovered; or location, nature, and severity of each leak);
3. Leak determination method;
4. Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days); and
5. Inspector name and signature.

8.16 Record of notifications. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.505(d), the owner or operator shall maintain documentation of all notifications required under permit condition 8.3(4) for at least two years.

8.17 Replacement of loading rack components. In accordance with ARSD 74:36:07:23, incorporating by reference 40 CFR § 60.500(c), any replacement of components of the existing loading rack in order to comply with any emission standard adopted by the state or political subdivision thereof will not be considered reconstruction under the provisions of ARSD 74:36:07:01, as referenced to 40 CFR § 60.15.

9.0 OPERATING RESTRICTIONS

9.1 Gasoline throughput and operational parameter restrictions. In accordance with ARSD 74:36:08:12, as referenced to 40 CFR § 63.420(a)(1) and (c), the owner or operator shall not exceed the value of the gasoline throughput or operational parameters listed in Table 9-1 in any 30-day rolling period.

Table 9-1 – Gasoline Throughput and Operational Parameter Values

CF	T_F	CE	T_E	T_{ES}	T_I	C	K	Q	OE
0.161	28	0	0	0	11	1,642	4.5 E-09	42,000	0.04

Where:

- CF = Fuel factor (1.0 for reformulated and 0.161 for all other gasoline);
- T_F = The number of fixed roof gasoline storage tanks with no internal floating roofs;
- CE = Control efficiency of the vapor processing system on the storage vessels;
- T_E = The number of external floating roof gasoline storage tanks with only primary roof seals;
- T_{ES} = The number of external floating roof gasoline storage tanks with primary and secondary roof seals;
- T_I = The number of fixed roof gasoline storage tanks with an internal floating roof;
- C = The number of pumps, valves, connectors, load arm valves, and open ended lines in gasoline service;
- K = 4.5E-9 for racks with vapor collection and processing systems;
- Q = Gasoline throughput limit in barrels/day (convert to liters/day); and
- OE = Total HAP from other emission sources not specified by the other parameters.

9.2 Proposed change to gasoline throughput or operational parameters. In accordance with ARSD 74:36:08:12, as referenced to 40 CFR § 63.428(i)(4), the owner or operator may submit a written notice to request a change to the gasoline throughput or any operational parameters listed in Table 9-1 prior to an exceedance of the gasoline throughput or operational parameter. The written notice shall consist of the following:

1. Name of facility, permit number, and reference to this permit condition;
2. A description of the change and the potential emissions resulting from the change;
3. A written proposal that lists the existing operational parameters, operational parameter changes, the screening equation, and the result of the screening equation;
4. The proposed schedule for changing the operational parameter(s); and
5. A signed certification as described in permit condition 5.3.

A request to change the gasoline throughput or operational parameter in Table 9-1 is considered a minor permit amendment if the proposed change is entered in Equation 9-1 and result in a value of “ E_T ” less than one and the Secretary determines no other state or federal requirements are applicable. A proposed change that results in an “ E_T ” equal to or greater than one is considered a permit modification.

Equation 9-1 – Screening Equation for an Area Source

$$E_T = CF[0.59(T_F)(1 - CE) + 0.17(T_E) + 0.08(T_{ES}) + 0.038(T_I) + 8.5 \times 10^{-6}(C) + KQ] + 0.04(OE)$$

Where:

- E_T = Emissions screening factor for bulk gasoline terminals;
- CF = Fuel factor (1.0 for reformulated and 0.161 for all other gasoline);
- T_F = The number of fixed roof gasoline storage tanks with no internal floating roofs;
- CE = Control efficiency of the vapor processing system on the storage vessels;
- T_E = The number of external floating roof gasoline storage tanks with only primary roof seals;
- T_{ES} = The number of external floating roof gasoline storage tanks with primary and secondary roof seals;
- T_I = The number of fixed roof gasoline storage tanks with an internal floating roof;

- C = The number of pumps, valves, connectors, load arm valves, and open ended lines in gasoline service;
- K = 4.52E-6 for racks with no vapor collection and processing system;
- Q = Gasoline throughput limit in barrels/day (convert to liters/day); and
- OE = Total HAP from other emission sources not specified by the other parameters.

9.3 NESHAP for gasoline distribution requirements. A proposed change to an operational parameter in Table 9-1 that results in an “E_T” value equal to or greater than one as calculated by Equation 9-1 will require the owner or operator to comply with ARSD 74:36:08:12, as referenced to 40 CFR, Part 63, Subpart R before the proposed change may be implemented.

9.4 Daily gasoline throughput and operational parameter records. In accordance with ARSD 74:36:05:16.01(8) and (9) and ARSD 74:36:08:12, as referenced to 40 CFR § 63.428(i)(2), the owner or operator shall maintain daily records and a 30 day rolling total to document that the gasoline throughput and operational parameters listed in Table 9-1 have not been exceeded.

9.5 Annual gasoline throughput and operational parameter report. In accordance with ARSD 74:36:08:12, as referenced to 40 CFR § 63.428(i)(3), the owner or operator shall submit an annual report to the Secretary. The annual report shall include the following information:

1. Name of facility, permit number, reference to this permit condition, identifying the submittal as an annual report, and calendar dates covered in the reporting period; and
2. A statement that the gasoline throughput and operational parameters in Table 9-1 have not been exceeded during the reporting period.

The annual report must be postmarked no later than 30 days (January 30th) after the end of the reporting period.

10.0 40 CFR PART 63, SUBPART BBBBBB

10.1 Compliance deadline. In accordance with 40 CFR § 63.11083(b), the owner or operator must comply with the permit conditions in this Chapter as well as any other applicable requirements of 40 CFR Part 63, Subpart BBBBBB no later than January 10, 2011.

10.2 Requirements for gasoline storage tanks. In accordance with 40 CFR § 63.11087(a), the owner or operator shall meet the emission limit and maintenance practice as outline below:

1. Each gasoline storage tank with a capacity of less than 75 cubic meters (19,813 gallons) shall be equipped with a fixed roof that is mounted to the storage tank in a stationary manner and maintain all openings in a closed position at all times when not in use; and
2. Each gasoline storage tank with a capacity of greater than or equal to 75 cubic meters (19,813 gallons) shall be equipped with one of the following:
 - a. A closed vent system and control device as specified in 40 CFR § 60.112b(a)(3) that reduces emissions of total organic hazardous air pollutants or total organic compounds by 95 weight-percent;
 - b. An internal floating roof as specified in 40 CFR § 60.112b(a)(1), except for the secondary seal requirements under 40 CFR § 60.112b(a)(1)(ii)(B) and the requirements in 40 CFR §

- 60.112b(a)(1)(iv) through (ix);
- c. An external floating roof as specified in 40 CFR § 60.112b(a)(2), except the requirements under 40 CFR § 60.112b(a)(2)(ii) apply only if the storage tank does not meet the requirements of 40 CFR § 60.112b(a)(2)(i); or
 - d. Equip and operate each internal and external floating roof gasoline storage tank as specified in 40 CFR § 63.1063(a)(1) and (b) and equip each external floating roof gasoline storage tank as specified in 40 CFR § 63.1063(a)(2) if the roof does not meet the requirements specified in 40 CFR § 63.1063(a)(1).

10.3 Testing requirements for gasoline storage tanks. In accordance with 40 CFR §§ 63.11087(c) and 63.11092(e), the owner or operator shall conduct inspections on the gasoline storage tanks as follows:

1. If a gasoline storage tank is equipped with an internal floating roof, the owner or operator shall conduct inspections of the floating roof system according to the requirements of 40 CFR § 60.113b(a) if you are complying with option 2(b) in permit condition 10.2 or according to the requirements of 40 CFR § 63.1063(c)(1) if you are complying with option 2(d) in permit condition 10.2;
2. If a gasoline storage tank is equipped with an external floating roof, the owner or operator shall conduct inspections of the floating roof system according to the requirements of 40 CFR § 60.113b(b) if you are complying with option 2(c) in permit condition 10.2 or according to the requirements of 40 CFR § 63.1063(c)(2) if you are complying with option 2(d) in permit condition 10.2; and
3. If a gasoline storage tank is equipped with a closed vent system and control device, the owner or operator shall conduct a performance test and determine a monitored operating parameter value in accordance with the requirements in 40 CFR § 11092(a) through (d), except that the applicable level of control specified shall be a 95-percent reduction in inlet total organic compounds levels rather than 80 mg/l of gasoline loaded.

10.4 Requirements for gasoline loading rack. In accordance with 40 CFR § 63.11088(a), the owner or operator shall:

1. Equip loading rack(s) with a vapor collection system designed to collect the total organic compound vapors displaced from cargo tanks during product loading;
2. Reduce emissions of total organic compounds to less than or equal to 80 mg/l of gasoline loaded into gasoline cargo tanks at the loading rack;
3. Design and operate the vapor collection system to prevent any total organic compound vapors collected at one loading rack from passing to another loading rack; and
4. Limit the loading of gasoline into gasoline cargo tanks that are vapor tight using the procedures specified in 40 CFR § 60.502(e) through (j). For the purposes of this section, the term “tank truck” as used in 40 CFR § 60.502(e) through (j) means “cargo tank” as defined in 40 CFR § 63.11100.

10.5 Requirements for equipment leaks. In accordance with 40 CFR § 63.11089(a), the owner or operator shall develop a leak detection and repair program that meets the following requirements:

1. Perform a monthly leak inspection of all equipment in gasoline service. The inspection detection methods may include sight, sound, and smell;

2. A log book shall be used and signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service;
3. Detection of a liquid or vapor leak shall be recorded in the log book. If a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak; and
4. Repairs of leaking equipment may be delayed if the repair is not feasible within 15 days.

10.6 Notification, records, and reports. In accordance with 40 CFR §§ 63.11093, 63.11094, and 63.11095, the owner or operator shall develop, maintain, and submit the applicable notification, records, and reports.

11.0 ENGINE REQUIREMENTS FOR HAPS

11.1 Date to comply with emission standards. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6595(a)(1), the owner or operator shall comply with the applicable emission standards and operating limitations specified in this chapter on and after May 3, 2014. EPA granted Magellan a compliance extension from May 3, 2013 to May 3, 2014.

11.2 Emission limit for engine. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6603(a), except during periods of startup, the owner or operator shall limit concentrations of carbon monoxide emission from the engine to less than or equal to 23 parts per million by volume on a dry basis at 15 percent oxygen or reduce carbon monoxide emissions from the engine by 70 percent or more. Compliance with the numerical emission limits is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in permit condition 11.9.

11.3 Operating limitations. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6603(a) and 63.6630(b), the owner or operator shall comply with the emission limit in permit condition 11.2 by one of the following methods:

If the owner or operator uses a oxidation catalyst, the owner or operator shall:

Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and

Maintain the temperature of the exhaust gases so that the catalyst inlet temperature is greater than or equal to 450 degrees Fahrenheit and less than or equal to 1,350 degrees Fahrenheit.

If the owner or operator complies without using an oxidation catalyst, the owner or operator shall comply with operating limitations approved by the Secretary.

11.4 Fuel requirements. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6604, the owner or operator shall only combust diesel fuel in the engine that meets the following per gallon standards:

Maximum sulfur content of 15 parts per million; and

Minimum cetane index of 40; or

Maximum aromatic content of 35 volume percent.

11.5 General requirements. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6605, the owner or operator shall be in compliance with permit condition 11.2 and 11.3 at all times. The owner or operator at all times must operate and maintain the engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required in permit condition 11.2 and 11.3 have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the engine.

11.6 Initial testing. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6612(a) and 63.6630(a), the owner or operator shall conduct an initial compliance demonstration within 180 days after May 3, 2013, according to one of the following applicable methods:

If the owner or operator decides to reduce carbon monoxide emissions using a oxidation catalyst and continuous parameter monitoring system, initial compliance is demonstrated by conducting an initial performance test using the applicable procedures described in permit condition 11.9 and if:

The average reduction of carbon monoxide emissions determined from the initial performance test achieves the required carbon monoxide percent reduction in permit condition 11.2;

The owner or operator has installed a continuous parameter monitoring system to continuously monitor catalyst inlet temperature according to permit condition 11.11; and

The owner or operator recorded the catalyst pressure drop and inlet temperature during the initial performance test.

If the owner or operator decides to limit the concentration of carbon monoxide emissions using a oxidation catalyst and continuous parameter monitoring system, initial compliance is demonstrated by conducting an initial performance test using the applicable procedures described in permit condition 11.9 and if:

The average carbon monoxide concentration determined from the initial performance test is less than or equal to the carbon monoxide emission limit in permit condition 11.2;

The owner or operator has installed a continuous parameter monitoring system to continuously monitor catalyst inlet temperature according to permit condition 11.11; and

The owner or operator recorded the catalyst pressure drop and inlet temperature during the initial performance test.

If the owner or operator decides to reduce carbon monoxide emissions and not use a oxidation catalyst, initial compliance is demonstrated by conducting an initial performance test using the applicable procedures described in permit condition 11.9 and if:

The average reduction of carbon monoxide emissions determined from the initial performance test achieves the required carbon monoxide percent reduction in permit condition 11.2;

The owner or operator has installed a continuous parameter monitoring system to continuously monitor operating parameters approved by the Secretary, if any, according to permit condition 11.11; and

The owner or operator recorded the approved operating parameters, if any, during the initial performance test.

If the owner or operator decides to limit the concentration of carbon monoxide emissions and not using a oxidation catalyst, initial compliance is demonstrated by conducting an initial performance test using the applicable procedures described in permit condition 11.9 and if:

The average carbon monoxide concentration determined from the initial performance test is less than or equal to the carbon monoxide emission limit in permit condition 11.2;

The owner or operator has installed a continuous parameter monitoring system to continuously monitor operating parameters approved by the Secretary, if any, according to permit condition 11.11; and

The owner or operator recorded the approved operating parameters, if any, during the initial performance test.

If the owner or operator decides to reduce carbon monoxide emissions using an oxidation catalyst and continuous emission monitoring system, initial compliance is demonstrated if:

The owner or operator has installed a continuous emission monitoring system to continuously monitor carbon monoxide and either oxygen or carbon dioxide emissions at both the inlet and outlet of the oxidation catalyst according to permit condition 11.10;

The owner or operator has conducted a performance evaluation of the continuous emission monitoring system using 40 CFR Part 60, Appendix B, Performance Specification 3 and 4A; and

The average reduction of carbon monoxide as calculated using permit condition 11.9 equals or exceeds the required percent reduction in permit condition 11.2. The initial performance test comprises the first 4-hour period after successful validation of the continuous emission monitoring system. Compliance is based on the average percent reduction achieved during the 4-hour period.

If the owner or operator decides to limit the concentration of carbon monoxide emissions using a oxidation catalyst and continuous emission monitoring system, initial compliance is demonstrated if:

The owner or operator has installed a continuous emission monitoring system to continuously monitor carbon monoxide and either oxygen or carbon dioxide emissions at the outlet of the oxidation catalyst according to permit condition 11.10; The owner or operator has conducted a performance evaluation of the continuous emission monitoring system using 40 CFR Part 60, Appendix B, Performance Specification 3 and 4A; and

The average reduction of carbon monoxide as calculated using permit condition 11.9 is less than or equal to the carbon monoxide emission limit in permit condition 11.2. The initial performance test comprises the first 4-hour period after successful validation of the continuous emission monitoring system. Compliance is based on the average concentration measured during the 4-hour period.

11.7 Initial testing may not be required. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6612(b) and 63.6670(c)(5), the owner or operator is not required to conduct the initial performance testing on an engine for which a performance test has been previously conducted provided the test must meet all of the following conditions:

The test must have been conducted using the same methods specified in this chapter and the methods must have been followed correctly;

The test must not be older than 2 years;

The test must be reviewed and accepted by the Administrator of EPA through the Secretary; and

Either no process or equipment changes must have been made since the test was performed or the owner or operator must be able to demonstrate the results of the performance test, with or without the adjustments, reliably demonstrates compliance despite process or equipment changes.

11.8 Subsequent performance test schedule. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6615, the owner or operator shall conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.

11.9 Performance test procedures. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6620, the owner or operator shall conduct each performance test according to the following:

If the owner or operator decides to reduce carbon monoxide emissions, the following is required: Measure the oxygen at the inlet and outlet of the control device with a portable oxygen analyzer using ASTM D6522-00 (2005) or 40 CFR Part 60, Appendix A, Methods 3A and 10.

Measurements to determine oxygen must be made at the same time as the measurements for carbon monoxide concentrations; and

Measure the carbon monoxide at the inlet and outlet of the control device with a portable carbon monoxide analyzer using ASTM D6522-00 (2005), ASTM D6348-03, 40 CFR Part 60, Appendix A, Methods 3A and 10, or 40 CFR Part 63, Appendix A, Method 320. The carbon monoxide concentrations must be at 15 percent oxygen, dry basis.

If the owner or operator decides to limit the concentration of carbon monoxide emissions, the following is required:

Select the sampling port locations and the number of traverse points using 40 CFR Part 60, Appendix A, Method 1 or 1A. If using a control device, the sampling site must be located at the outlet of the control device;

Determine the oxygen concentration at the sampling port locations using 40 CFR Part 60, Appendix A, Method 3, 3A, or 3B or ASTM Method D6522-00 (2005);

Measure the moisture content at the sampling port locations using 40 CFR Part 60, Appendix A, Method 4, 40 CFR Part 63, Appendix A, Method 320, or ASTM D6348-03; and

Measure the carbon monoxide concentrations at the sampling port locations using 40 CFR Part 60, Appendix A, Method 10, 40 CFR Part 63, Appendix A, Method 320, ASTM D6522-00 (2005), or ASTM D6348-03. The carbon monoxide concentration must be at 15 percent oxygen, dry basis.

The owner or operator must conduct three separate test runs for each performance test and each test run shall last at least 1 hour. Upon receiving approval from the Secretary, results of a test run may be replaced with the results of an additional test run in the event that:

A sample is accidentally lost after the testing team leaves the site;

Conditions occur in which one of the three runs must be discontinued because of forced shutdown;

Extreme meteorological conditions occur; or

Other circumstances occur that are beyond the control of the owner or operator.

Equation 11-1 shall be used to determine compliance with the percent reduction requirement;

Equation 11-1 – Demonstrating compliance with percent reduction

$$R = \frac{C_i - C_o}{C_i} \times 100$$

Where:

C_i = Concentration of carbon monoxide at the control device inlet;

C_o = Concentration of carbon monoxide at the control device outlet; and

R = Percent reduction of carbon monoxide emissions.

The owner or operator must normalize the carbon monoxide concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen or an equivalent percent of carbon dioxide. If pollutant concentrations are to be corrected to 15 percent oxygen and carbon dioxide concentrations is measured in lieu of oxygen concentration measurement, a carbon dioxide correction factor is needed. Calculate the carbon dioxide correction factor as described below: Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from 40 CFR Part 60, Appendix A, Method 19, section 15.2 and Equation 11-2;

Equation 11-2 – Fuel-specific F_o value

$$F_o = \frac{0.209F_d}{F_c}$$

Where:

F_o = Fuel factor based on the ratio of oxygen volume to ultimate carbon dioxide volume produced by the fuel at zero percent excess air;

0.209 = Fraction of air that is oxygen, percent/100;

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from 40 CFR Part 60, Method 19, dry standard cubic foot per 10^6 Btus; and

F_c = Ratio of the volume of carbon dioxide produced to the gross calorific value of the fuel from 40 CFR Part 60, Method 19, dry standard cubic foot per 10^6 Btus.

Calculate the carbon dioxide correction factor for correcting measurement data to 15 percent oxygen using Equation 9-3; and

Equation 11-3 – Carbon dioxide correction factor

$$X_{CO_2} = \frac{5.9}{F_o}$$

Where:

X_{CO_2} = Carbon dioxide correction factor, percent; and

5.9 = 20.9 percent oxygen-15 percent oxygen, the defined oxygen correction value, percent.

Calculate the nitrogen oxide and sulfur dioxide gas concentrations adjusted to 15 percent oxygen using carbon dioxide and Equation 9-4;

Equation 11-4 – Carbon dioxide correction factor

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2}$$

Where:

%CO₂ = Measured carbon dioxide concentration, dry basis, percent.

If the owner or operator complies with the emission limit or the reduction of carbon monoxide emissions and is not using an oxidation catalyst, the owner or operator must submit the operational limitations to be established during the initial performance test and continuously monitor those parameter thereafter or request approval of no operating limitations. The initial performance test shall not be conducted until after the proposed operational limitations or no operational limitation has been approved by the Secretary.

The submittal for proposing operational limitations shall include the following:

Identification of the specific parameters the owner or operator proposes to use as operating limitations;

A discussion of the relationship between these parameters and hazardous air pollutant emissions, identifying how hazardous air pollutant emissions change with changes in these parameters, and how limitations on these parameters will serve to limit hazardous air pollutant emissions;

A discussion of how the owner or operator will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

A discussion identifying the methods the owner or operator will use to measure and the instruments the owner or operator will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

A discussion identifying the frequency and methods for recalibrating the instruments the owner or operator will use for monitoring these parameters.

The submittal for proposing no operational limitations shall include the following:

Identification of the parameters associated with operation of the engine and any emission control device which could change intentionally (e.g., operator adjustment, automatic controller adjustment) or unintentionally (e.g., wear and tear, error) on a routine basis or over time;

A discussion of the relationship, if any, between changes in the parameters and changes in hazardous air pollutant emissions;

For the parameters which could change in such a way as to increase hazardous air pollutant emissions, a discussion of whether establishing limitations on the parameters would serve to limit hazardous air pollutant emissions;

For the parameters which could change in such a way as to increase hazardous air pollutant emissions, a discussion of how the owner or operator could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

For the parameters, a discussion identifying the methods the owner or operator could use to measure them and the instruments the owner or operator could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments the owner or operator could use to monitor them; and

A discussion of why, from the owner's or operator's point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report:

The engine model number;

The engine manufacturer;

The year of purchase;

The manufacturer's site-rated brake horsepower;

The ambient temperature, pressure, and humidity during the performance test;

All assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained; and

If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

11.10 Requirements for a continuous emission monitoring system. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(a), if the owner or operator elects to install a continuous emission monitoring system for demonstrating compliance, the owner or operator must install, operate, and maintain a continuous emission monitoring system to monitor

carbon monoxide and either oxygen or carbon dioxide at both the inlet and outlet of the control device according to the following requirements:

Each continuous emission monitoring system must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR Part 60, Appendix B; The owner or operator must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each continuous emission monitoring system according to the applicable performance specifications of 40 CFR Part 60, Appendix B as well as daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, Procedure 1; Each continuous emission monitoring system must complete a minimum of one cycle of operation (e.g., sampling, analyzing and data recording) for each successive 15-minute period. The owner or operator must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data; and The continuous emission monitoring system data must be reduced to 1-hour average computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of continuous emission monitoring data may be used. The continuous emission monitoring data shall be recorded in parts per million at 15 percent oxygen or the equivalent carbon dioxide concentration.

11.11 Requirements for a continuous parameter monitoring system. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(b), if the owner or operator elects to install a continuous parameter monitoring system for demonstrating compliance, the owner or operator must install, operate, and maintain a continuous parameter monitoring system according to the following requirements:

The owner or operator must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined below:

The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations; Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

Equipment performance evaluations, system accuracy audits, or other audit procedures;

Initial and any subsequent calibration of the continuous parameter monitoring system;

Determination and adjustment of the calibration drift of the continuous parameter monitoring system;

Preventive maintenance of the continuous parameter monitoring system, including spare parts inventory;

Data recording, calculations, and reporting;

Accuracy audit procedures, including sampling and analysis methods;

Program of corrective action for a malfunctioning continuous parameter monitoring system;

Ongoing operation and maintenance procedures that are consistent with good air pollution control practices and meet at least the following:

The owner or operator must keep the necessary parts for routine repairs of the equipment associated with the continuous parameter monitoring system; and

All continuous parameter monitoring systems shall be installed, operational, and the data verified prior to or in conjunction with conducting the performance test. Verification of operational status shall at a minimum include completion of the manufacturer's written specification or recommendations for installation, operation, and calibration of the system.

The following recordkeeping and reporting requirements:

All required continuous parameter monitoring system measurements including monitoring data recorded during unavoidable continuous parameter monitoring system breakdowns and out-of-control periods;

The date and time identifying each period during which the continuous parameter monitoring system was inoperative except for zero (low-level) and high-level checks;

The date and time identifying each period during which the continuous parameter monitoring system was out of control. A continuous parameter monitoring system is out of control if the zero (low-level) or high-level calibration drift exceeds two times the applicable calibration drift specification or the relevant standard or the continuous parameter monitoring system fails a performance test audit, relative accuracy audit, relative accuracy test audit or linearity test audit.

The beginning of the out-of-control period is the hour the owner or operator conducts a performance check that indicates an exceedance of the performance requirements. The end of the out-of-control period is the hour following completion of corrective action and successful demonstration the system is within the allowable limits;

The specific identification (e.g., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances that occurs during startups, shutdowns, and malfunctions of the engine;

The specific identification (e.g., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances that occurs during periods other than startups, shutdowns, and malfunctions of the engine;

The nature and cause of any malfunction (if known);

The corrective action taken or preventive measures adopted;

The nature of the repairs or adjustments to the continuous parameter monitoring system that was inoperative or out of control;

The total process operating time during the reporting period;

All procedures that are part of a quality control program developed and implemented for the continuous parameter monitoring system; and

The owner or operator shall submit a copy of a written report of the results of the continuous parameter monitoring system performance evaluation within 60 days of completion of the performance evaluation.

The owner or operator must install, operate, and maintain each continuous parameter monitoring system in continuous operation according to the procedures in the owner's or operator's site-specific monitoring plan;

The continuous parameter monitoring system must collect data at least once every 15 minutes;

For a continuous parameter monitoring system measuring a temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger;

The owner or operator must conduct the continuous parameter monitoring system equipment performance evaluation, system accuracy audits, or other audit procedures specified in the owner's or operator's site-specific monitoring plan at least annually; and

The owner or operator must conduct a performance evaluation of each continuous parameter monitoring system in accordance with the owner's or operator's site-specific monitoring plan.

The owner or operator shall maintain these written procedures on record for the life of the facility or until the facility is no longer subject to this permit condition and must be made available for inspection. If the written procedures are revised, the owner or operator shall keep previous (e.g., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Secretary, for a period of 5 years after each revision.

The owner or operator may request approval of monitoring system quality assurance and quality control procedures alternative to those specified above for the owner's or operator's site-specific monitoring plan.

11.12 Installation of open or closed crankcase system. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(g), if the engine is not equipped with a closed crankcase ventilation system, the owner or operator shall comply with one of the following:

Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere; or

Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

The owner and operator must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Secretary to approve different maintenance requirements that are as protective as manufacturer requirements.

11.13 Minimizing engine time during startup. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6625(h), the owner or operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards in permit condition 11.2 apply.

11.14 Monitoring and collecting data to demonstrate continuous compliance. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6635, the owner or operator shall continuously monitor the engine at all times when it is operating, except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failure that are caused in part by poor maintenance or careless operation are not malfunctions. The owner or operator shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels.

11.15 Demonstrating continuous compliance. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6640(a), the owner or operator shall demonstrate continuous compliance with each emission limit in permit condition 11.2 and operating limit in permit condition 11.3 according to the following methods:

If the owner or operator reduced carbon monoxide emissions or limits the concentration of carbon monoxide in the engine's exhaust and using a continuous emissions, demonstrating continual compliance with permit condition 11.2 is demonstrated by:

Collecting the monitoring data according to permit condition 11.10;
Reducing the measurements to 1-hour averages;
Calculating the percent reduction or concentration of carbon monoxide emission according to permit condition 11.9;
Demonstrating the catalyst achieves the required percent reduction of carbon monoxide emissions over the 4-hour averaging period or the emissions remain at or below the carbon monoxide concentration limit; and
Conduct an annual relative accuracy test audit of the continuous emission monitoring system using 40 CFR Part 60, Appendix B, Performance Specification 3 and 4A as well as daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, Procedure 1.
If the owner or operator reduces carbon monoxide emissions or limits the concentration of carbon monoxide in the engine's exhaust and using a oxidation catalyst, demonstrating continual compliance with permit condition 11.2 is demonstrated by:
Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for carbon monoxide to demonstrate the required carbon monoxide percent reduction is achieved or the emissions remain at or below the carbon monoxide concentration limit;
Collecting the catalyst inlet temperature data according to permit condition 11.11;
Reduce the data to 4-hour rolling averages;
Maintain the 4-hour rolling averages within the operating limit for the catalyst inlet temperature; and
Measure the pressure drop across the catalyst once per month and demonstrate the pressure drop across the catalyst is within the operation limit established during the performance test.
If the owner or operator reduces carbon monoxide emissions or limits the concentration of carbon monoxide in the engine's exhaust and not using a oxidation catalyst, demonstrating continual compliance with permit condition 11.2 is demonstrated by:
Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for carbon monoxide to demonstrate the required carbon monoxide percent reduction is achieved or the emissions remain at or below the carbon monoxide concentration limit;
Collecting the approved operating parameter, if any, data according to permit condition 11.11;
Reduce the data to 4-hour rolling averages; and
Maintain the 4-hour rolling averages within the operating limit for the operating parameters established during the performance test.

11.16 Reporting deviations. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6640(b), the owner or operator shall report instances when the engine did not meet the emission limits in permit condition 11.2 or operating limits in permit condition 11.3. These deviations must be reported in the semiannual report required in permit condition 11.19. If the owner or operator changes the catalyst, the owner or operator must reestablish the values of the operating parameters measured during the initial performance test. When the owner or operator reestablishes the values of the operating parameters, the owner or operator must also conduct a performance test to demonstrate the owner or operator is meeting the required emission limits in permit condition 11.2.

11.17 Performance test notifications. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 66.6645(g), and in accordance with ARSD 74:36:08:03, as referenced to 40 CFR §§ 63.7(b)(1), 63.7(c), and 63.8(e)(3), the owner or operator shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin to allow the Secretary an opportunity to review and approve the site-specific test plan and have an observer present during the test. The site-specific test plan shall include:

A test program objectives and summary;

The test schedule;

Data quality objectives, which are the pretest expectations of precision, accuracy, and completeness data;

An internal quality assurance program which includes, at a minimum, the activities planned by routine operators and analysts to provide an assessment of the continuous monitoring system performance; and

An external quality assurance program which includes, at a minimum, systems audits that include the opportunity for onsite evaluation of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

11.18 Notification of compliance status. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6630(c) and 63.6645(h), and in accordance with ARSD 74:36:08:03, as referenced to 40 CFR § 63.9(h)(2)(ii), the owner or operator shall submit a Notification of Compliance Status containing the following information for each performance test or compliance demonstration:

The methods used to determine compliance;

The results of any performance tests, continuous monitoring system performance evaluations, and/or other monitoring procedures or methods that were conducted;

The methods used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

The quantity of carbon monoxide emitted by the engine reported in the appropriate units for demonstrating compliance with permit condition 11.2;

A description of the air pollution control device (or method) for each engine, including the control efficiency (percent) for each control device (or method); and

A statement by the owner or operator as to whether the source has complied with the relevant standard or other requirements.

If the compliance demonstration does not require a performance test, the owner or operator must submit the Notification of Compliance Status within 30 days after completion of the compliance demonstration. A Notification of Compliance Status for each performance test and compliance demonstration that involves a performance test shall be submitted within 60 days after completion of the performance test.

11.19 Semiannual compliance report. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR § 63.6650(a), (b), (c), (d), and (e), the owner or operator shall submit a semiannual report which contains the following:

Company name and address;

Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

Date of report and beginning and ending dates of the reporting period;

If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused the emission limit in permit condition 11.2 to be exceeded. The report must also include a description of actions taken by the owner or

operator during the malfunction to minimize emissions, including actions taken to correct a malfunction;

If there are no deviations from any emission limit in permit 11.2 or operating limits in permit condition 11.3, a statement that there were no deviations from the emission limits or operating limits during the reporting period;

If there were no periods during which the continuous monitoring system was out-of-control as specified in permit condition 11.11(1)(k)(iii), a statement there were no periods during which the continuous monitoring system was out-of-control during the reporting period;

For each deviation where the owner or operator is not using a continuous monitoring system to comply, the semiannual report shall contain the following:

The total operating time of the engine involved with the deviation; and

Information on the number, duration, and cause of deviations, including unknown causes, and the corrective action taken;

For each deviation where the owner or operator is using a continuous monitoring system to comply, the semiannual report shall contain the following:

The date and time each malfunction started and stopped;

The date, time, and duration that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks;

The date, time, and duration that each continuous monitoring system was out-of-control, including a description of any corrective actions taken;

The date and item each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;

A summary of the total duration of the deviation during the reporting period and total duration as a percent of the total operating time of the engine during the reporting period;

A summary of the total duration of continuous monitoring system downtimes during the reporting period and total duration of continuous monitoring system downtime as a percent of the total operating time of the engine during the reporting period;

An identification of each parameter and pollutant that was monitored for the engine;

A brief description of the engine;

A brief description of the continuous monitoring system;

The date of the latest continuous monitoring system certification or audit; and

A description of any changes in the continuous monitoring system, processes, or controls since the last reporting period.

The first semiannual report shall cover the period beginning May 3, 2013 and ending on June 30, 2013. The first semiannual report must be postmarked or delivered no later than July 31, 2013. Each subsequent semiannual report must cover the semiannual reporting period from January 1 through June 30 or July 1 through December 31. Each subsequent semiannual report shall be postmarked or delivered no later than July 31 or January 31.

11.20 Recordkeeping. In accordance with ARSD 74:36:08:40, as referenced to 40 CFR §§ 63.6655 and 63.6660, the owner or operator shall maintain the following records:

A copy of each notification and report the owner or operator submitted to comply with this chapter, including all documentation supporting any Initial Notification or Notification of Compliance Status reports;

Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment;

Records of performance tests and performance evaluations;

Records of all required maintenance performed on the air pollution control and monitoring equipment;

Records of actions taken during periods of malfunction to minimize emissions, corrective actions taken or preventive measures adopted to restore a malfunctioning process, air pollution control, and/or monitoring equipment to its normal or usual manner of operation;

For each continuous monitoring system, the owner or operator must keep the following records:

All measurements during periods of unavoidable continuous monitoring system breakdowns and out-of-control periods;

The date and time identifying each period during which the continuous monitoring system was inoperative except for zero (low-level) and high-level checks;

The date and time identifying each period during which the continuous monitoring system was out-of-control;

The date and time of each period of excess emissions and parameter monitoring exceedances that occurs during startups, shutdowns, and malfunctions;

The date and time of each time period of excess emissions and parameter monitoring exceedances during periods other than startups, shutdowns, and malfunctions;

The nature of the repairs or adjustments to the continuous monitoring system that was inoperative or out of control;

The total process operating time during the reporting period;

All procedures that part of the quality control program developed in accordance 11.11(1);

All required measurements needed to demonstrate compliance with a relevant standard including, but not limited to, 15-minute averages of continuous monitoring system data, raw performance testing measurements, and raw performance evaluation measurements that support data submitted in the semiannual report;

If the owner or operator installs a continuous emissions monitoring system where the system installed is automated and the calculated data averages do not exclude periods of continuous emission monitoring system breakdown or malfunction, in lieu of maintaining a file of all continuous emission monitoring system sub-hourly measurements as required under subsection (6)(b) of this permit condition, the owner or operator shall retain the most recent consecutive three averaging periods of sub-hourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard. An automated continuous emission monitoring system records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system;

If the owner or operator installs a continuous emissions monitoring system where the measured data is manually reduced to obtain the reportable form of the standard and where the calculated data averages do not exclude periods of continuous emissions monitoring system breakdown or malfunction, in lieu of maintaining a file of all continuous emissions monitoring system sub-hourly measurements as required under subsection (6)(b) of this permit condition, the owner or operator shall retain all sub-hourly measurements for the most recent reporting period. The sub-hourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report;

All results of performance tests and continuous monitoring system performance evaluations;

All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

All continuous monitoring system calibration checks; and

All adjustments and maintenance performed on the continuous monitoring system;

Previous versions of the performance evaluation plan as required in permit condition 11.11; and

Requests for alternatives to the relative accuracy test for the continuous monitoring system as required in permit condition 11.11.

Records required in permit condition 11.15 to show continuous compliance with the emission limits in permit condition 11.2 and operating limits in permit condition 11.3.

All records shall be maintained in a form suitable and readily available for expeditious review for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site.

11.21 Circumvention not allowed. In accordance with ARSD 74:36:08:03, as referenced to 40 CFR § 63.4(b), no owner or operator shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to the use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere.